

An Evidence Map of the Women Veterans' Health Research Literature (2008 – 2015)

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March 9, 2016

Acknowledgements

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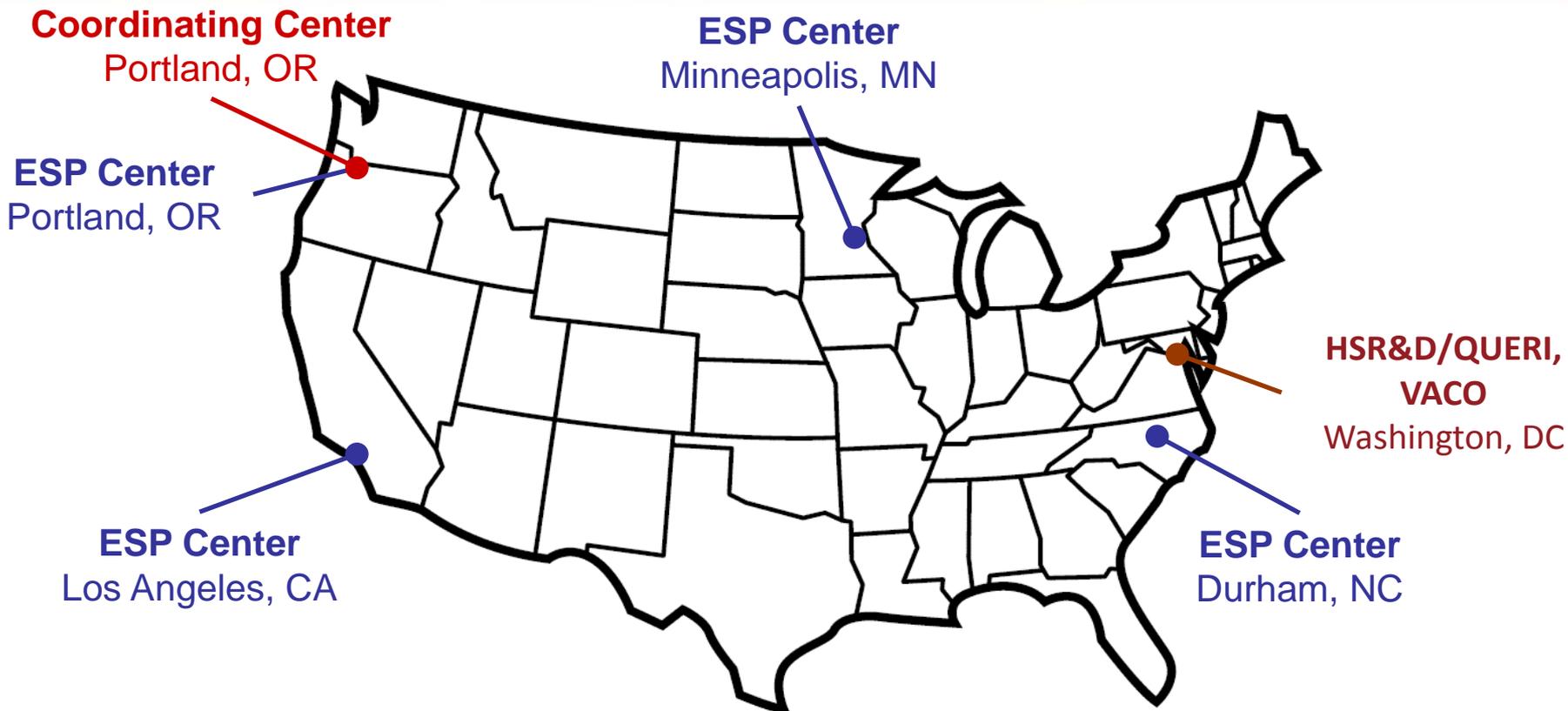
Disclosure

This report is based on research conducted by the Evidence-based Synthesis Program (ESP) Center located at the Minneapolis VA Medical Center, Minneapolis, MN, funded by the Department of Veterans Affairs, Veterans Health Administration, Office of Research and Development, Quality Enhancement Research Initiative. The findings and conclusions in this document are those of the author(s) who are responsible for its contents; the findings and conclusions do not necessarily represent the views of the Department of Veterans Affairs or the United States government. Therefore, no statement in this article should be construed as an official position of the Department of Veterans Affairs. No investigators have any affiliations or financial involvement (*eg*, employment, consultancies, honoraria, stock ownership or options, expert testimony, grants or patents received or pending, or royalties) that conflict with material presented in the report.

VA Evidence-based Synthesis Program (ESP) Overview

- Sponsored by VA Office of Research and Development and the Quality Enhancement Research Initiative (QUERI)
- Established to provide timely and accurate syntheses/reviews of healthcare topics identified by VA clinicians, managers, and policy-makers, as they work to improve the health and healthcare of Veterans.
- Reports conducted by internationally recognized VA clinician methodologists
- Builds on staff and expertise already in place at the Evidence-based Practice Centers (EPC) designated by AHRQ. Four of these EPCs are also ESP Centers, as shown on the following map.

ESP Center Locations



VA Evidence-based Synthesis Program (ESP) Overview

- Provides evidence syntheses on important clinical practice topics relevant to Veterans. These reports help:
 - develop clinical policies informed by evidence;
 - the implementation of effective services to improve patient outcomes and to support VA clinical practice guidelines and performance measures; and
 - guide the direction of future research to address gaps in clinical knowledge.
- Broad topic nomination process – *eg*, VACO, VISNs, field staff – facilitated by the ESP Coordinating Center (Portland) through an online process:

<http://www.hsrd.research.va.gov/publications/esp/TopicNominationForm.pdf>

Current report

AN EVIDENCE MAP OF THE WOMEN VETERANS' HEALTH RESEARCH LITERATURE (2008 – 2015)

(October 2016)

Full-length report available on ESP website:

<http://vaww.hsrd.research.va.gov/publications/esp/womens-health2.cfm>

Poll Question

1. What is your role in women Veterans health at the VA?
(select all that apply)

- Clinician – mostly male patients
- Clinician – mostly female patients
- Researcher – women’s health interest/other
- Program staff
- Other (student, etc)

Overview

A woman in a military uniform, wearing a blue cap and a blue jacket, is saluting with her right hand. She is looking slightly to the right of the camera with a neutral expression. The background is a plain, light color.

- ▶ **Background:**
Women's Health at the VA
- ▶ **Methods:**
 - Systematic Reviews vs. Evidence Maps
- ▶ **Results:** A Map of the Women Veterans' health literature: 2008–2015
- ▶ **Key Findings & Conclusions**

Women in the US Military

National Center for Veterans Analysis and Statistics.
America's Women Veterans: Military Service History and VA Benefit Utilization Statistics, 2011

Revolutionary War

Army Nurse Corps

WWII

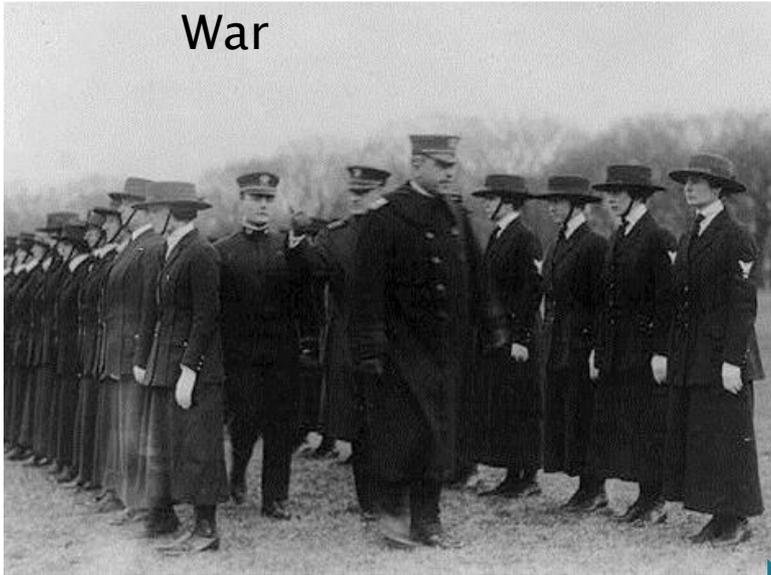
Restrictions Lifted

1775 1861 1901 1914 1941 1948 1967

Civil War

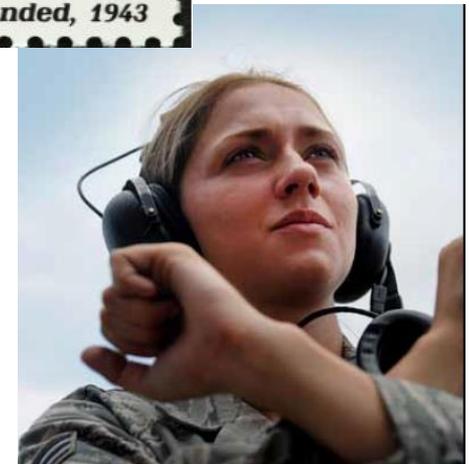
WWI

Armed Services Integration Act



Today: **15%** of military is female

- 20% of new recruits
- 17% of officers



2011 2013 2016

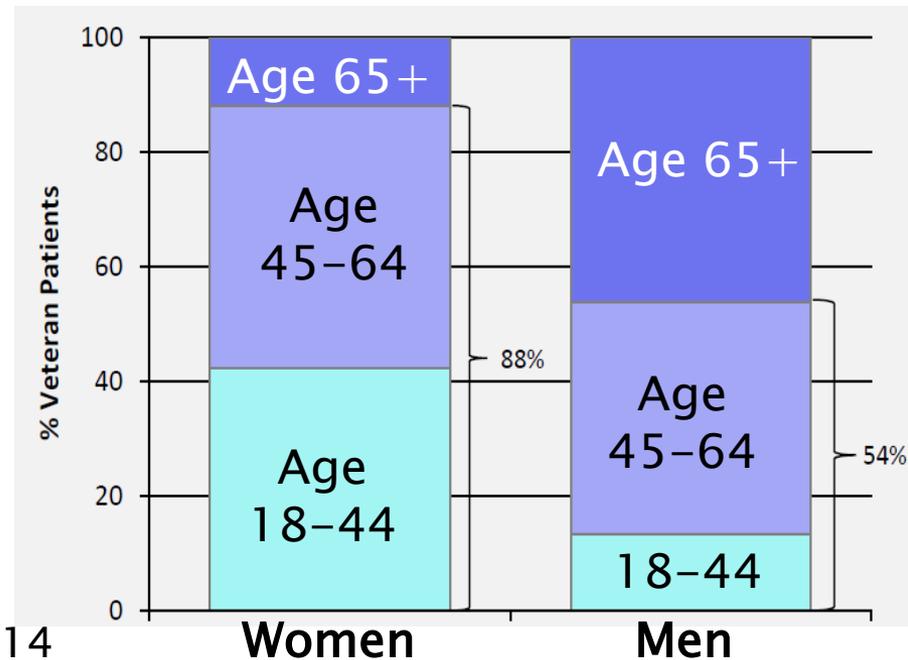
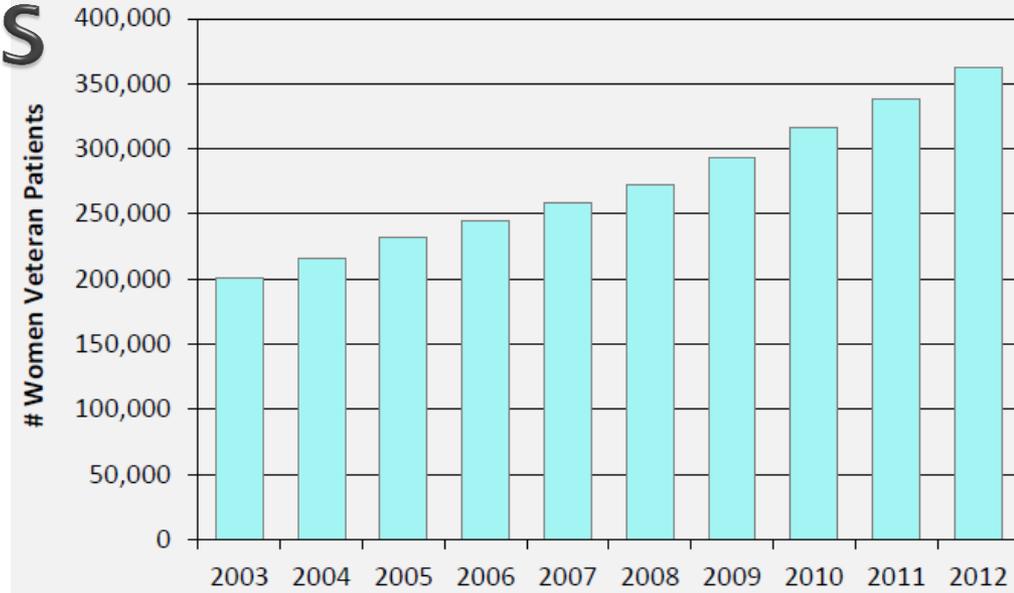
Don't Ask Don't Tell Ends

Combat Exclusion Ends

Transgender servicemembers allowed

Women Veterans

- ▶ **10%** of all living Veterans are women
 - 16% by 2040
- ▶ **20%** of women Veterans use VA healthcare
- ▶ **7%** of VA patients are women
 - Nearly doubled in past decade
- ▶ Younger than men
- ▶ More diverse
 - 39% racial/ethnic minority



WOMEN VETERANS HEALTH CARE

*You served, you deserve
★ the best care anywhere.*



Research

Policy

Clinical

Women's Health Research Network: Future Research Agenda (2011)

Mental Health

Primary Care and Prevention (Primary Care Delivery)

Reproductive Health

Post Deployment Health

Complex Chronic Conditions/Aging & Long-term Care

Access to Care & Rural Health

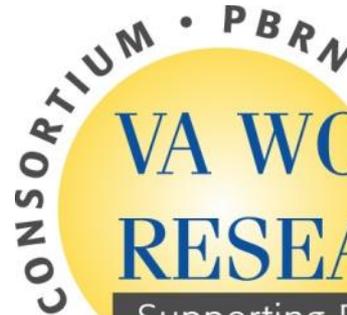
VA Women's Health in 2015

CLINICAL



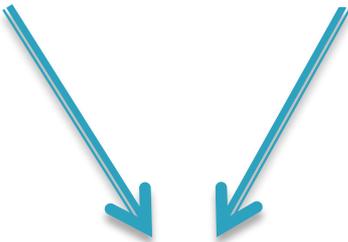
RESEARCH

WOMEN VETERANS
HEALTH CARE



VA WOMEN'S HEALTH
RESEARCH NETWORK

Supporting Practice and Research Collaboration



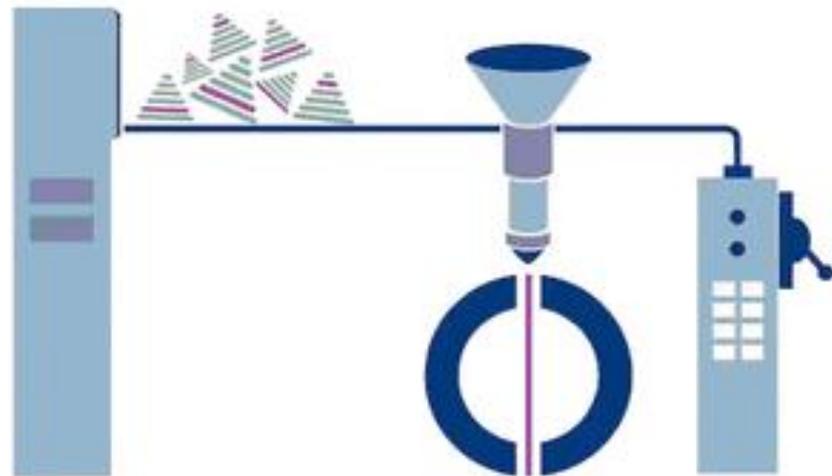
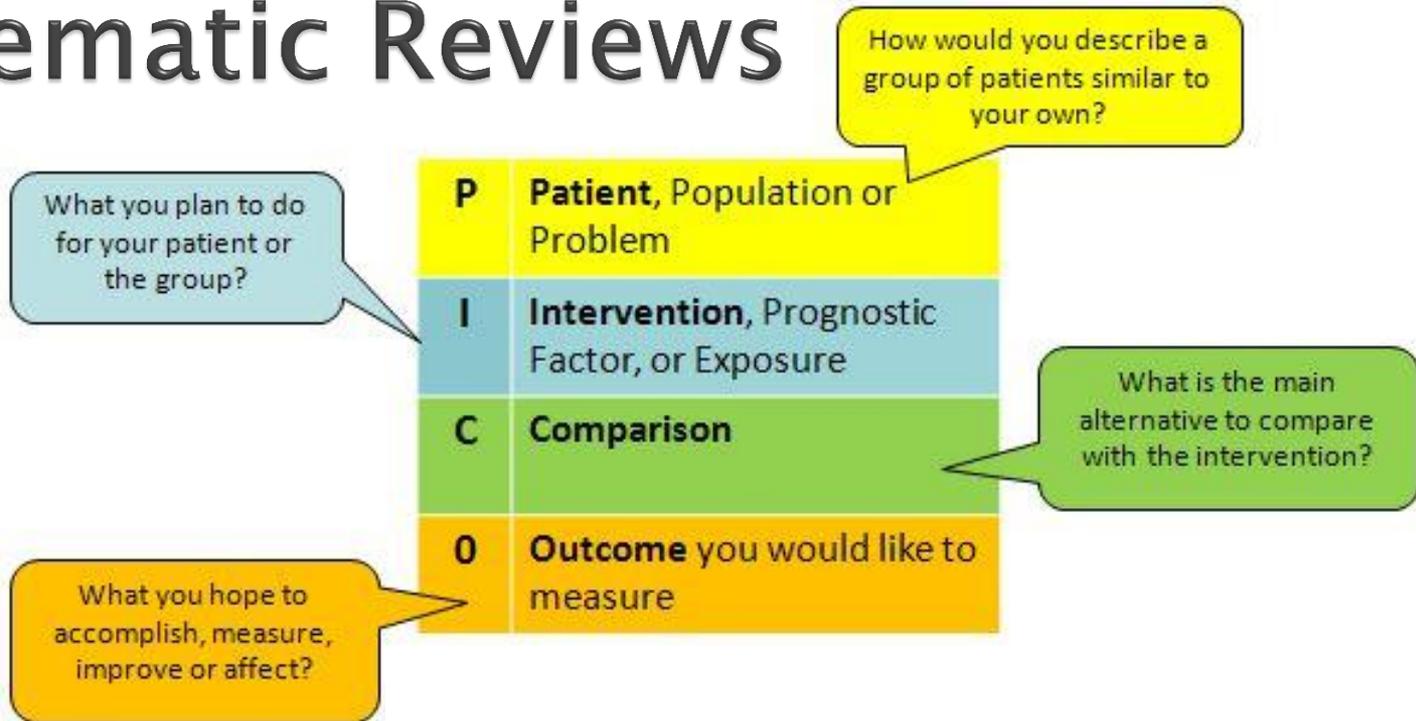
Request Systematic
Review (2008–2015)

Overview

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Systematic Reviews



Women's Health Review Request

- ▶ Research related to women veterans' health and healthcare published since 2008

P	Women Veterans
I	Any
C	Any
O	Any



Alternative Review: Evidence Map

Miake-Lye et al. *Systematic Reviews* (2016) 5:28
DOI 10.1186/s13643-016-0204-x

Systematic Reviews

RESEARCH

Open Access



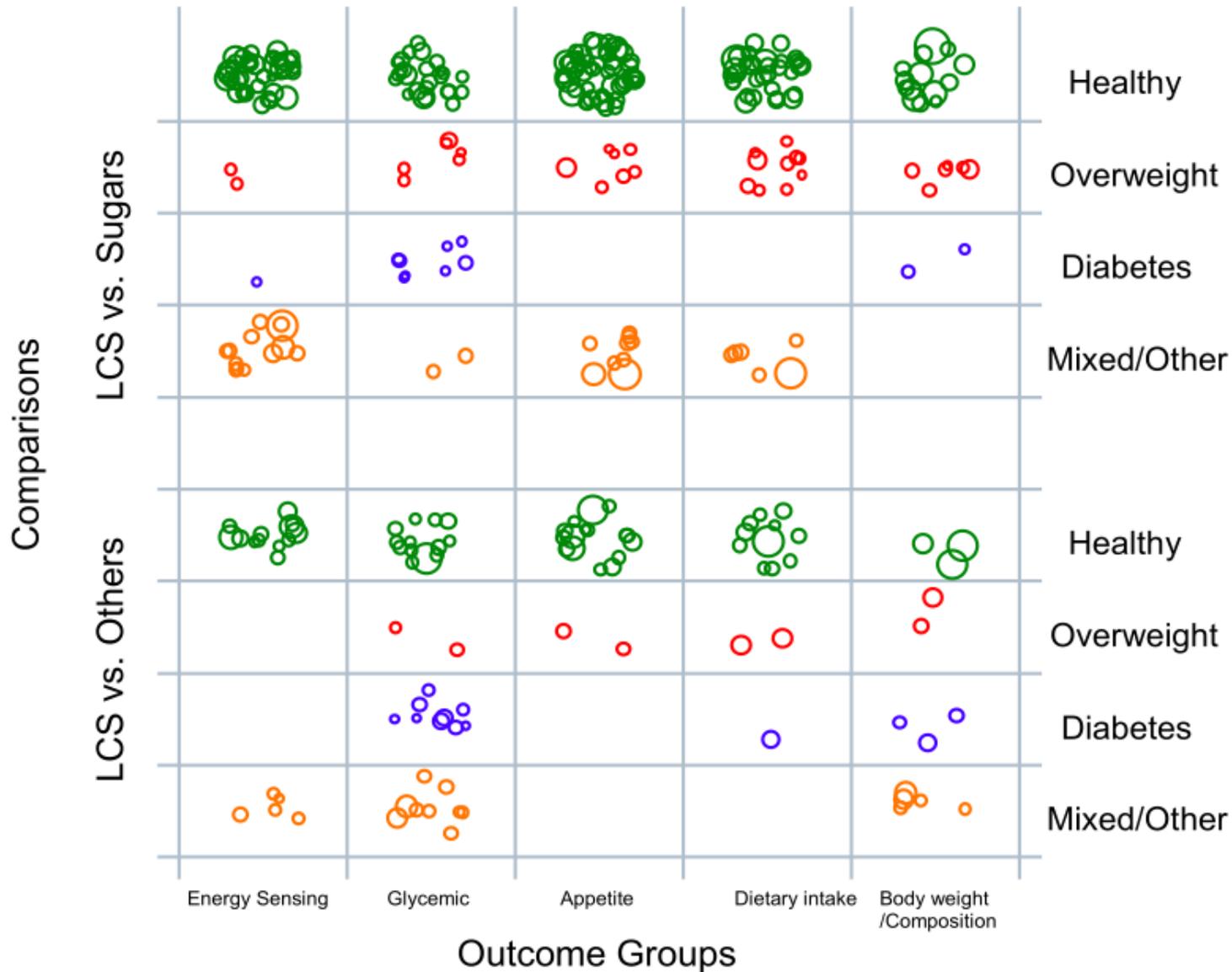
What is an evidence map? A systematic review of published evidence maps and their definitions, methods, and products

Isomi M. Miake-Lye^{1,2*}, Susanne Hempel³, Roberta Shanman³ and Paul G. Shekelle^{1,3,4}

Definition: Evidence Maps

- ▶ A systematic search of a broad field
- ▶ Goal: to identify gaps in knowledge and/or future research needs
- ▶ Presents results in a user-friendly format
 - Visual figure or graph
 - Searchable database
- ▶ Stakeholders involved early on
- ▶ Evidence Maps do NOT:
 - Rate the quality of the evidence
 - Extract or synthesize study results

Visual map - example



Methods – Search

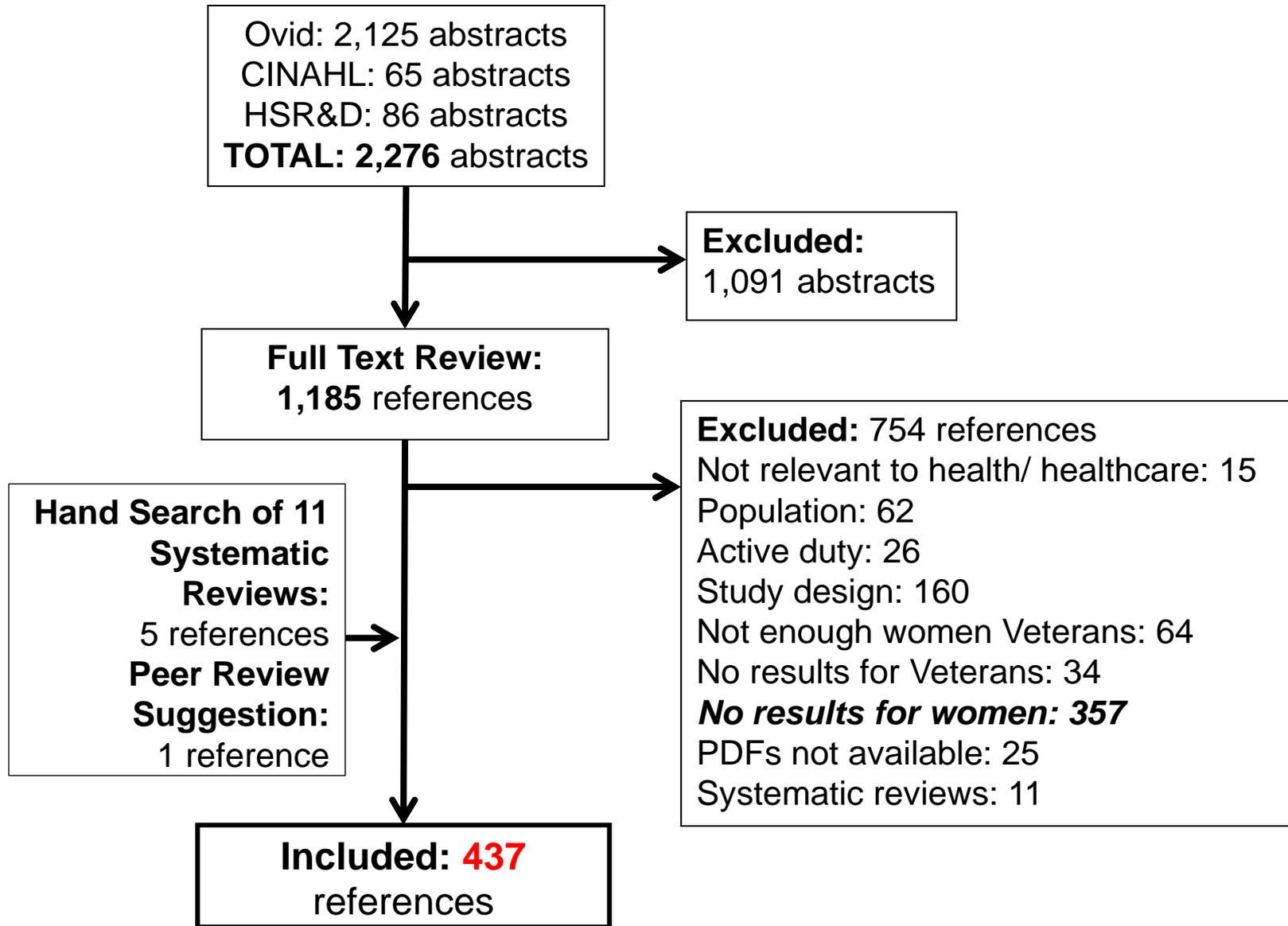
- ▶ Search: MEDLINE, CINAHL, HSR&D database
 - MeSH terms: Women; Women's health; Women's Health Services; Veterans; Veterans Health; Hospitals, Veterans
- ▶ Exclusion Criteria:
 - Not related to health/healthcare
 - Does not include Female Veterans
 - Very small proportion Female or Veterans
 - Results not stratified for Female or Veterans

Overview

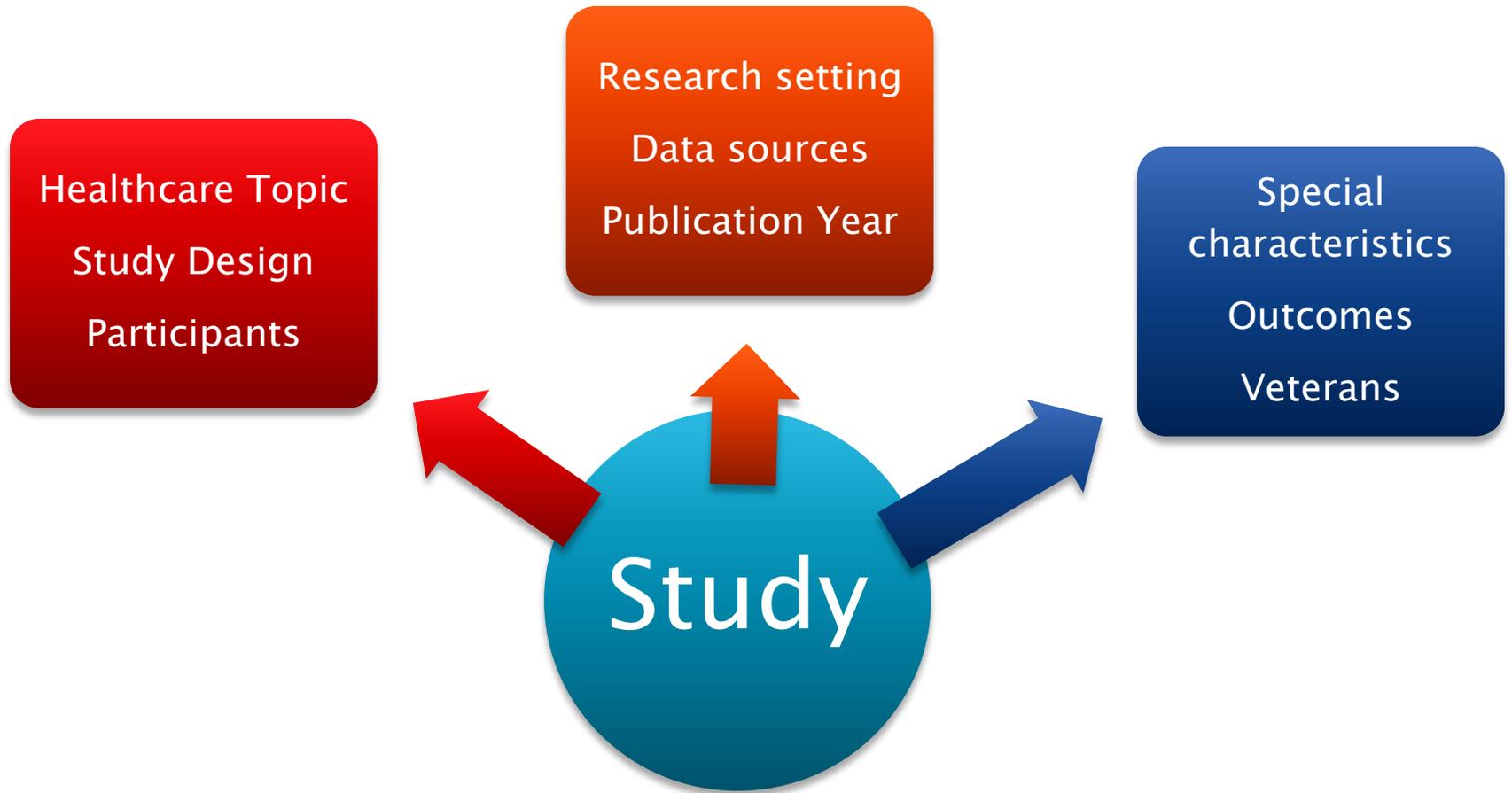
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Literature Flow



Data Abstraction



Evidence Map

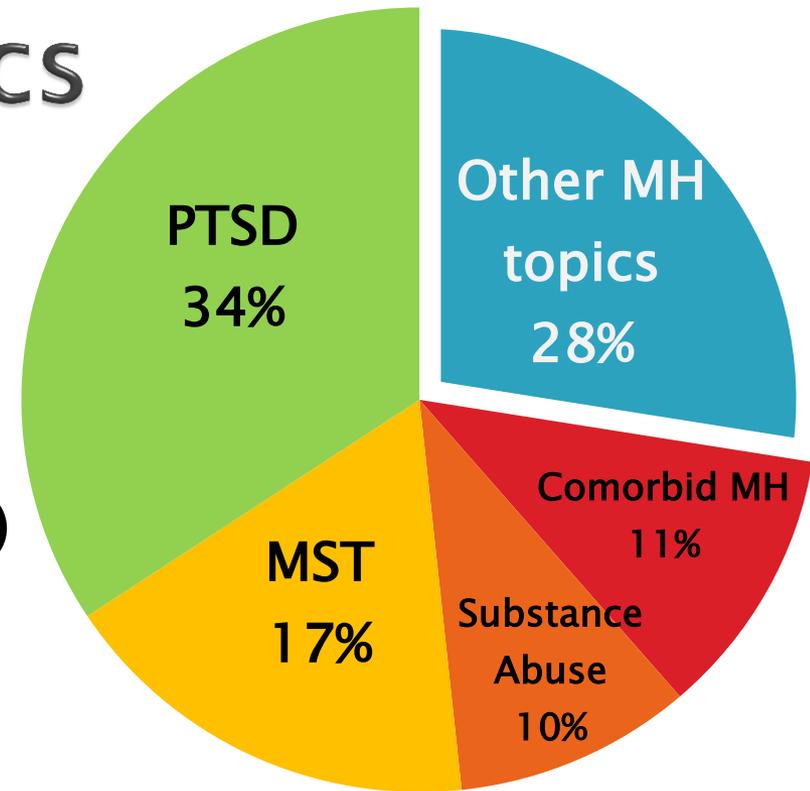
		Healthcare Category					
		Mental Health	Physical Health	Healthcare Organization and Delivery	Access, Utilization, Post-Deployment Health	Other	
Study Size	n < 100	<ul style="list-style-type: none"> ●○ RCT ●○ Secondary Analysis of RCT ●○ Observational ●○ Qualitative ● 100% women ○ <100% women 					
	n = 100 - 1000						
	n > 1000						

Mental Health Studies (47%)

Mental Health Topic	# Studies
PTSD and trauma	71
Military sexual trauma	36
Substance abuse	20
Depression and anxiety	4
Suicide	13
Intimate partner violence	9
Disordered eating	5
Reproductive mental health	4
Serious mental illness	3
Personality disorders	0
Other mental health topics	3
Multiple mental health diagnoses	16
Mental health comorbid with non-mental health	23
TOTAL	207

Common MH topics

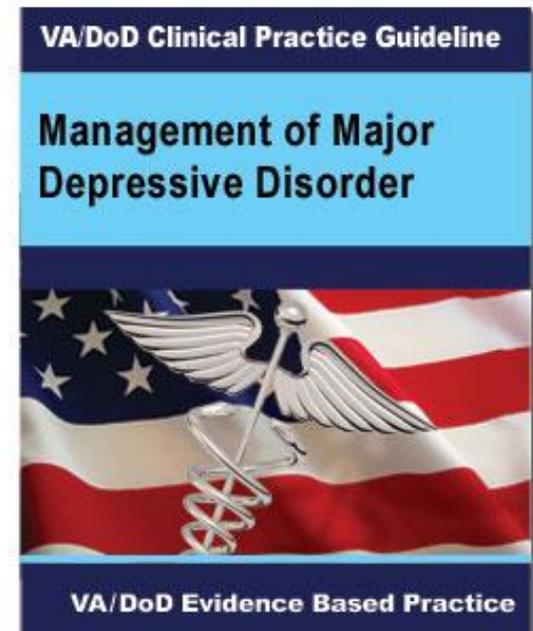
- ▶ PTSD (71)
 - 3 RCTs in 2014 and 2015
- ▶ Military Sexual Trauma (36)
 - 1 RCT; 7 prospective cohort
- ▶ Substance abuse (20)
- ▶ MH comorbid with non-MH diagnoses (23)



Potential Growth: Mental Health

- ▶ Depression (3) & Anxiety (1)
 - Depression is the most common MH diagnosis
 - 4 large, observational studies (EHR), <15% female

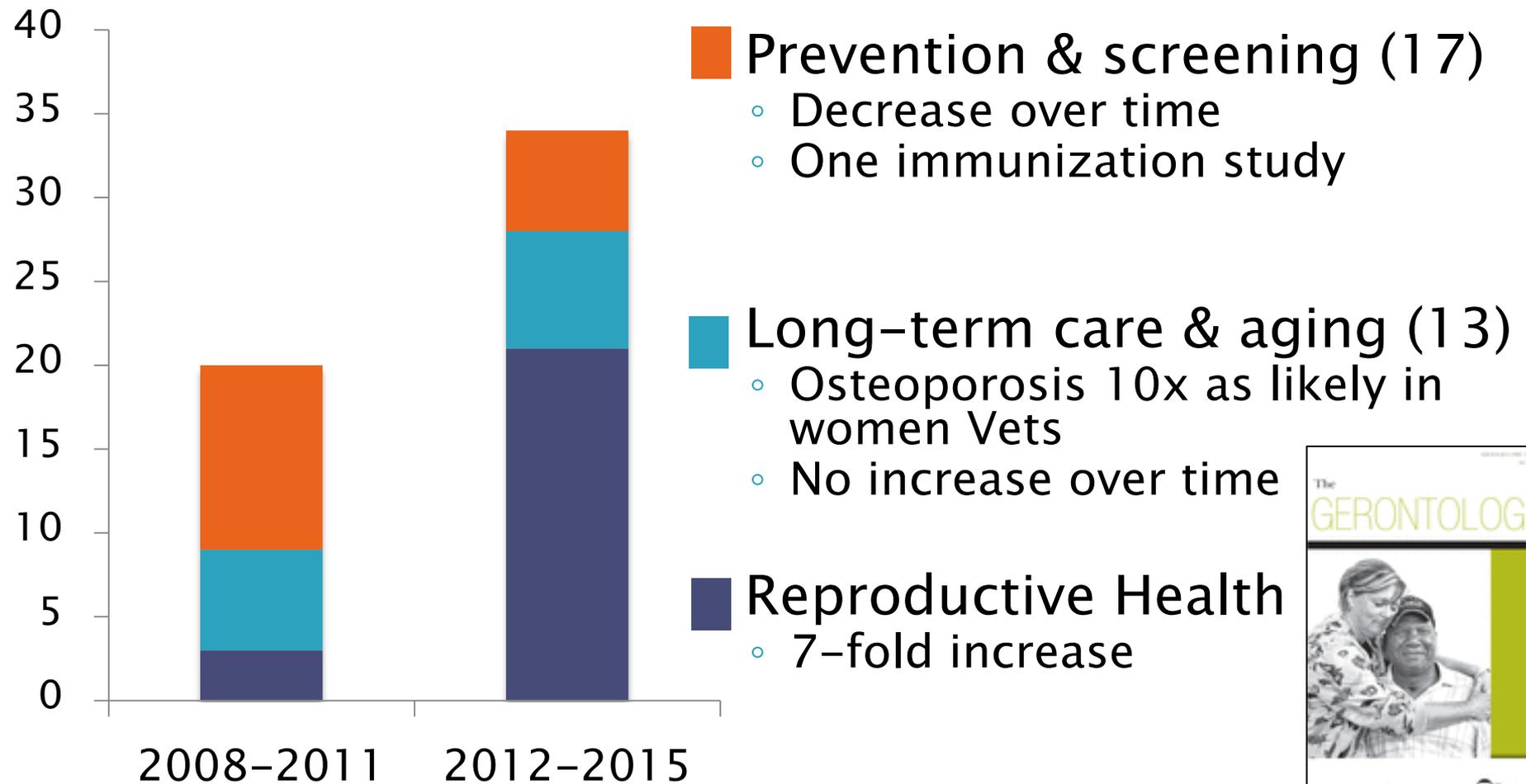
- ▶ Reproductive Mental Health (4)
 - Over 10,000 pregnancies annually



Physical Health Studies (30%)

Physical Health Topic	# Studies
Reproductive health	24
Prevention/Screening	17
Long-term care/aging	13
Cardiovascular disease	11
Obesity	9
Chronic pain	7
Cancer	6
Traumatic brain injury	5
HIV/AIDS	5
Tobacco	6
Multiple sclerosis	4
Diabetes	3
Spinal cord injury	1
Traumatic amputations	1
Hypertension	0
Comorbid medical conditions	7
Other medical conditions	13
TOTAL	132

Common Physical Health Topics



Potential Growth: Physical Health

- ▶ Diabetes (3) & Hypertension (0)
 - Common primary care conditions
 - Large observational studies
- ▶ TBI (5), SCI (1) & Traumatic amputation (1)
 - Potential for increased incidence with changes in combat participation

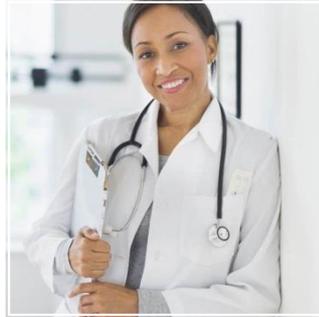


Healthcare Organization & Delivery (7%)

Healthcare Topics	# Studies
Comprehensive and primary care delivery	16
Mental health care delivery	9
Emergency care delivery	3
Virtual or telehealth care delivery	3
TOTAL	31

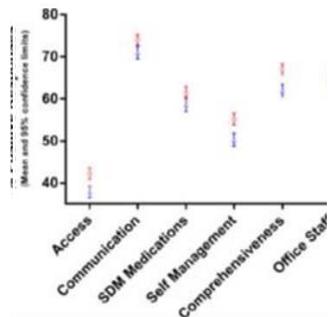
- ▶ 45% published in 2015!

Comprehensive primary care delivery for Women Veterans (16)



RCT: Provider Education

Qualitative:
Providers & Veterans



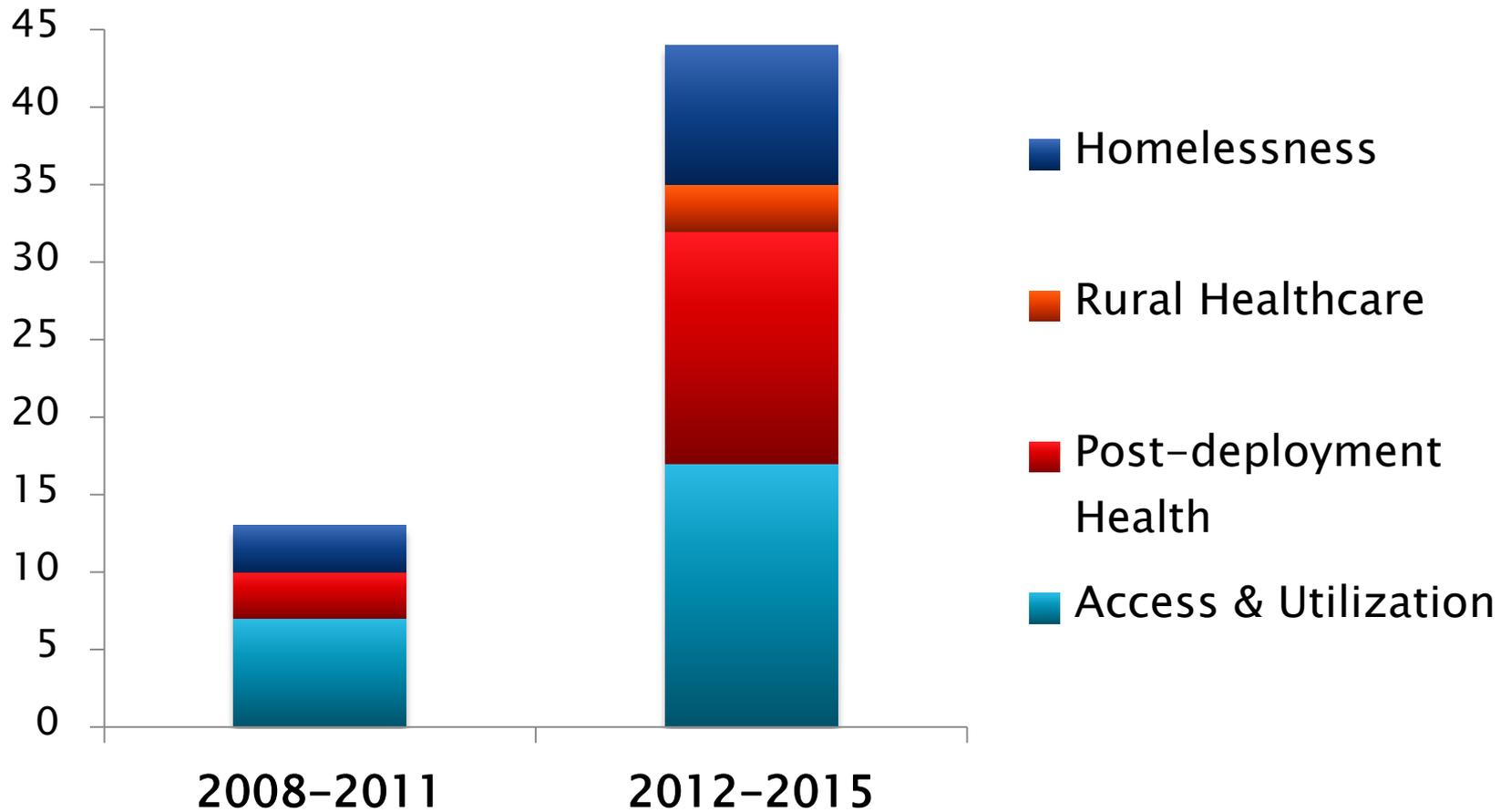
Observational:

- Needs, preferences, experiences & outcomes
- Effects of WH Provider designation

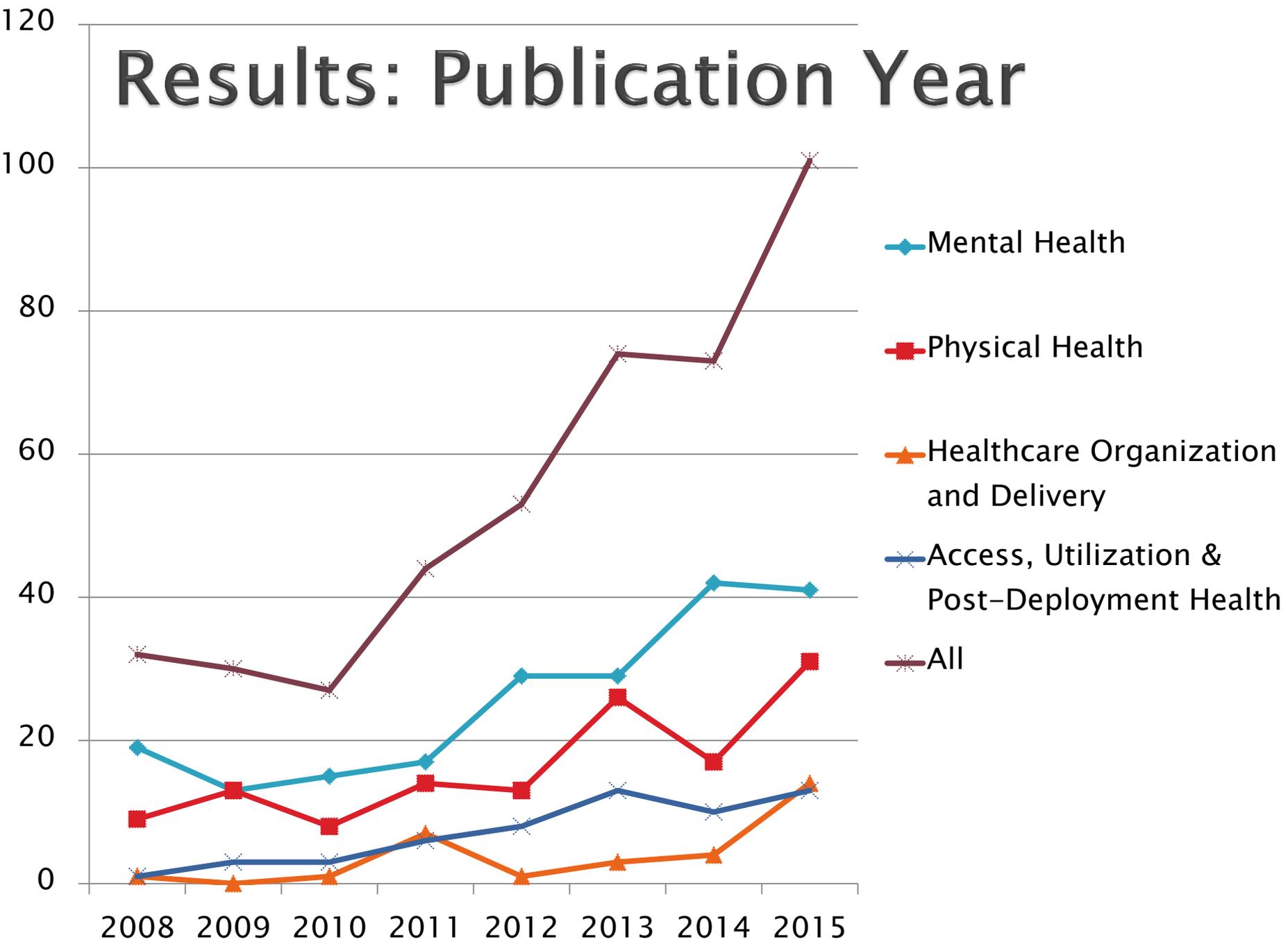
Access, Utilization & Post-Deployment Health (13%)

Access Topics	# Studies
Barriers and facilitators of care	13
Healthcare utilization	11
Post-deployment health	18
Rural healthcare	3
Homelessness	12
TOTAL	57

Access, Utilization & Post-Deployment Health over time



Results: Publication Year



Funding source

Funding Source	Number of Studies	Proportion of Studies
VA	302	69%
DoD	29	7%
Other Government (NIH)	64	15%
Foundation	24	5%
Industry	4	<1%
University	18	4%
Not Reported	89	20%
Unfunded	6	1%

Attention to priority populations

- ▶ Priority populations
 - OEF/OIF Veterans (20% of studies)
- ▶ Vulnerable populations
 - LGBT Veterans
 - Racial and Ethnic minorities
 - Homeless veterans

→ *Most studies published since 2012*



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Topics with evidence of growth

Mental Health

Primary Care and Prevention (Primary Care Delivery)

Reproductive Health

Post Deployment Health

Complex Chronic Conditions/Aging & Long-term Care

Access to Care & Rural Health

Gaps in the evidence



- ▶ Common mental health topics
 - Depression & Anxiety
 - Reproductive Mental Health
- ▶ Medical topics in primary & complex care
 - Diabetes & Hypertension
 - TBI, SCI and amputation
- ▶ Randomized Controlled Trials (8/437)
 - Up to 11 excluded
 - Fourteen more in progress?

Future directions

- ▶ Capturing more data
 - Sex-specific reporting in research
- ▶ Social and Cultural shifts
 - Combat
 - Don't ask Don't Tell
 - Transgender



- ▶ Veteran engagement
- ▶ Systematic reviews – specific topics



National Institutes
of Health

Conclusions

- ▶ Women Veterans are a rapidly growing population of VA patients with unique medical and social needs
- ▶ Aligning research, policy, and clinical initiatives will best serve women Veterans
- ▶ Evidence map can be used to direct future research, policy and clinical care

Questions?

If you have further questions, please feel free to contact:

Elisheva Danan, MD, MPH

elizabeth.danan@va.gov

Full-length report and cyberseminar available on ESP website:

<http://www.hsrd.research.va.gov/publications/esp/>

Women's Health Research Evidence Map

Policy Implications

Sally Haskell, MD, MS

Deputy Chief Consultant, Women's Health Services

Research Informing Women's Health Policy

Research was critical in informing women's health policy:

- How does health and health care differ?
- What is the impact of military service on women's lives?
- Are we providing equitable care?
- What is the best model of care?
- How do we justify resource allocation?
- ***Early agenda setting defined research needs***
- We have come a long way!

Early Data Informed Policy Development

- Comprehensive Women's Health
 - Defined population differences
 - Gender disparities
 - Fragmentation of care
 - Organization of care
 - Models of care
 - Best practices—Preliminary outcomes
 - Barriers to care
- Women's mental health—PTSD, MST, substance use, disordered eating....
- Reproductive Health

Evidence Map Identifies Progress and Gaps

- Wealth of interest, research skill, new knowledge
- PBRN/ Women's Health Research Network
- Capacity unlike any other health care system to study sex/gender differences in health and health care needs
- The evidence map identifies critical gaps
 - Prevention
 - Chronic Diseases
 - Aging and long term care
 - Depression
- Our largest population of women Veterans is 45-65 and we are just beginning to gain knowledge about the impact of military service on their lives, prevention, chronic disease burden, and how to tailor care to their needs going forward